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COUNTY OF CLACKMANNAN.



Thirty-Fifth  
**Annual Report**


Upon the  
Health and Sanitary Condition of the  
County and Burghs.

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1925.

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C. C. FINLATOR, M.D., D.P.H.,  
MEDICAL OFFICER OF HEALTH.



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C. C. FINLATOR, M.D., D.P.H.,  
MEDICAL OFFICER OF HEALTH.

ALLOA :  
Buchan Brothers, 29 Candleriggs.  
1926.

*To the Scottish Board of Health, the County Council of  
Clackmannan, and the Town Councils of Alloa,  
Alva, Tillicoultry and Dollar.*

My Lords and Gentlemen,

I have the honour to submit to you the Annual Report for the year 1925 on the Health and Sanitary Condition of the County of Clackmannan and the Burghs therein.

The Report is based upon the instructions issued by the Board of Health in a Circular dated 30th December, 1925. These instructions follow the lines of those issued last year, but some additional details are asked for and new tabular statements are included in the appendix to supply the information requested.

Owing to illness I was off duty for a period of five months, during which the work was carried on by Dr Josephine Cairns for one month and by Dr Margaret Cairns for three months in a very satisfactory manner. I have to thank you for granting me the sick leave required and for appointing these ladies to act as my deputies. I also desire to record my thanks to the Medical Practitioners in the County, all of whom gave valuable voluntary help in the work during my enforced absence, some of them at the sacrifice of a good deal of time.

I have the honour to be,

My Lords and Gentlemen,

Your obedient Servant,

C. C. FINLATOR.

*County Buildings,  
Alloa,*



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## Clackmannanshire, 1925.

AS in recent years, this Report is planned in such a way that matters affecting the County as a whole, or which are common to several of the Local Authorities, are first dealt with, while details concerning individual Local Authorities follow.

### Population—Area—Density of Population.

	Population.		Area in Acres.	Persons per Acre
	1921 Census	Estimated at Middle of 1925		
Clackmannan County District .	11,331	10,689	33,143	0·32
Alloa Burgh - - - -	12,421	13,237	1,074	12·32
Alva Burgh - - - -	4,107	3,947	270	14·61
Tillicoultry Burgh - - -	3,100	3,042	248	12·26
Dollar Burgh - - - -	1,584	1,589	219	7·25
Total - - - -	32,543	32,504	34,954	0·92

The population shown at the middle of 1925 is the estimate of the Registrar-General, who announces that in the preparation of the local population estimates for 1925 he has departed from the method previously in use in that he has applied the emigration adjustment to all Burghs and Districts in Scotland, instead of only to those where the population estimates were made otherwise than on housing statistics. The result of this change of method is generally to lower the estimates of the 16 larger burghs and to increase those of other public health districts. The new method appears to give a more accurate estimate of the populations of the public health districts in this County.

### Vital Statistics.

The birth-rate and the various mortality rates for 1925 are shown in Table I. of the Appendix, together with the mean of the rates of the previous five years, which gives a better idea of the health conditions prevailing in small communities than the rates for a single year. Table I. shows that the County of Clackmannan during 1925 had a birth rate of 19·0 compared with 21·3 for Scotland, and a death rate of 12·7 compared with 13·4 for Scotland. The infantile death rate was only 79 compared with 91 for Scotland, and the death rate from epidemic disease was 0·61 compared with 0·84. The death rate from pulmonary tuberculosis was 0·52

for the County compared with 0.76 for Scotland, while the rate for non-pulmonary tuberculosis was 0.15 compared with 0.34. The birth-rate is thus extremely low, as that for Scotland is lower than all previously recorded, with two exceptions, those of the two war-time years 1917 and 1918. To balance this it will be noted that all the principal death rates which can be controlled to some extent by Public Health activities are satisfactorily lower than those for Scotland. There is, in common with Scotland as a whole, an increase in deaths from cancer, and the large number of deaths from heart disease seems to call for special investigation. To give a rough idea of the gravity of these diseases there were in the County during 1925, 60 deaths from heart disease, 47 from cancer and only 33 from all forms of tuberculosis, a disease which has long been considered by the public as the most fatal. A considerable amount of research work is now being devoted to cancer and also to heart disease, especially in its relation to its causative factor rheumatism, and it is probable that these diseases will in due course come under the care of Public Health Authorities as regards their prevention and treatment.

### **Conditions Affecting the Health of the County, Enquiries Made, Advice Given, etc.**

There is nothing new to report as regards conditions which affect the health of the County.

The usual enquiries and inspections were made, while advice was given and certificates were granted in all the various branches of Public Health work.

### **Pollution of Rivers.**

The pollutions remain as previously reported upon for all practical purposes. During the year the Town Council of Alva considered a report by an Engineer regarding the installation of increased sewage purification plant on modern lines. No definite action has yet been taken regarding the matter.

### **Infectious Diseases Hospital.**

The County Combination Infectious Diseases Hospital has been fully described in previous reports. The Hospital is in a very satisfactory condition.

Dr Fergusson, the Medical Superintendent, has supplied me with the following particulars regarding admissions to Hospital during 1925:—Typhoid or Enteric Fever, 2; Scarlet Fever, 89;

Diphtheria, 28; Erysipelas, 6; Puerperal Fever, 2; Acute Primary Pneumonia, 8; Ophthalmia Neonatorum, 1; Observation Case (Encephalitis Lethargica), 1; Total, 137.

The following cases died in Hospital:—Diphtheria, 2; Scarlet Fever, 1; Acute Primary Pneumonia, 2.

The Smallpox Hospital was fully reported upon in the reports of 1920 and 1921. It is regularly inspected and kept ready for the reception of patients on short notice.

The Horse Ambulance Van is in good condition and in regular use. The provision of a Motor Ambulance would be a great improvement, however.

### **Disinfection and Prevention of Infectious Diseases.**

The means available for disinfection were fully detailed in the report for 1920 and are still in operation.

The usual measures of notification, isolation, disinfection and quarantine of contacts were carried out. During epidemics schools were visited and classes of children were examined where any suspicion of infection being spread in school arose. Headmasters were advised as to the best methods of dealing with outbreaks and the class rooms were disinfected as required.

### **Public Health (Pneumonia, Malaria, Dysentery, etc.) Regulations (Scotland), 1919.**

#### **Public Health (Infectious Disease Carriers) Regulations (Scotland), 1921.**

Arrangements for the isolation of "carriers" are made at the County Fever Hospital. Since the regulations came in force, a few "carriers" of diphtheria have been dealt with, but none were notified during 1925. 21 cases of Pneumonia and 4 of Influenzal Pneumonia were notified, 8 of which were treated in Hospital.

### **Treatment of Venereal Diseases.**

The arrangements made by the County Joint V.D. Committee with the Stirlingshire Joint V.D. Committee whereby the Clinic of the latter Committee, adjoining Stirling Royal Infirmary, is made available for cases of Venereal Disease from this County still continue as formerly.

During the year ending 15th May, 1925, 24 cases attended the Clinic for the first time from Clackmannan. The total attendances of Clackmannanshire patients were 520, while 38 microscopic examinations, 29 blood tests and 153 injections of Salvarsan

substitutes were required for these patients. The statistics for the following year are not yet available, but judging by the number of cases dealt with by the M.O.H., the number attending the Clinic is on the increase.

A number of unemployed persons had their train fares paid to Stirling to enable them to carry out the treatment. This was arranged for at the office of the M.O.H., County Buildings, Alloa, where information and advice as to treatment can be obtained with due respect to privacy.

### Control of Tuberculosis.

Full details of the administrative control of Tuberculosis were published in the Annual Reports of 1922 and 1923.

During the year, a Committee was appointed to find suitable office accommodation for the M.O.H., to include facilities for the examination of cases of tuberculosis, but so far none has been found. The present arrangements are far from satisfactory.

As regards **Pulmonary Tuberculosis**, 27 cases were notified as compared with a yearly average of 42.6 for the previous five years, while the deaths of cases under observation numbered 16 compared with a yearly average of 24.4 for the previous five years. This is a distinct improvement in the incidence of and in the number of deaths from Pulmonary Tuberculosis but, while it is hoped that improvement will be maintained, it is unlikely that it can continue in such a marked degree.

The following Table gives details in each Local Authority's area:—

	Under Obser- vation, 1st Jan., 1925.	Notified dur- ing 1925.	Transferred from other Districts.	Died.	Cases Com- pleted or Left District	Under Obser- vation 31st Dec 1925.
Clackmannan County District -	33	5	...	4	2	32
Alloa Burgh - - - -	32	14	3	7	4	38
Alva Burgh - - - -	25	4	2	2	...	29
Tillicoultry Burgh - - -	20	4	...	3	..	21
Dollar Burgh - - - -	5	0	...	...	...	5
Total - - - -	115	27	5	16	6	125
	147			147		

As regards **Non-Pulmonary Tuberculosis**, 16 cases were notified during the year, as compared with 28 the previous year. De-

tails will be found in the Appendix in the Infectious Diseases Returns. Five cases died during the year, and 26 cases were known in the County still suffering from the disease at the end of the year.

The amount and nature of Treatment given will be seen from the following Table:—

	Received Sana- torium Treatment	Received Hospital Treatment	Received Domi- ciliary Treatment
Clackmannan County District -	6	3	11
Alloa Burgh - - - -	5	5	14
Alva Burgh - - - -	2	4	9
Tillicoultry Burgh - - -	0	2	8
Dollar Burgh - - - -	0	0	0
Total - - - -	13	14	42

Of these cases the treatment of 4 at Sanatoria, 6 in Hospital and 10 at their own homes was continued from last year. There were 2 cases in Sanatoria, 7 in Hospital and 19 in receipt of domiciliary treatment at the end of 1925.

Twelve cases were treated at Ochils Hills Sanatorium, and one at Durham County Sanatorium, the latter receiving training as well as treatment under the Ministry of Pensions Scheme. Two other cases were treated privately at Sanatoria. Fourteen cases were treated at the Tuberculosis Pavilion at the County Fever Hospital, of which 8 were admitted during 1925. Two of these 14 cases suffered from Non-Pulmonary Tuberculosis while a number of others were treated in General Hospitals by operation or otherwise, but only in one instance was a fee charged to the Tuberculosis Committee. The Tuberculosis Committee, with the approval of the Scottish Board of Health, erected two sleeping shelters at the Pavilion in order to increase the accommodation there and they are proving of great service.

In his capacity as Tuberculosis Officer the M.O.H. paid 45 visits to patients, and had 207 attendances of patients at his Office, compared with 130 visits and 322 consultations last year. The falling off of this work was largely due to the absence of the M.O.H. on sick leave.

The District Nurses and Health Visitors paid 973 visits to cases of Tuberculosis, made up as follows:—County District, 372; Alloa, 391; Alva, 16; Tillicoultry, 187; Dollar, 7.



### **Scheme of Maternity Service and Child Welfare.**

This has been fully detailed in previous reports. The Central Committee for Maternal and Child Welfare deals with the Scheme under the provisions of the Notification of Births Act and the Midwives (Scotland) Act so far as they concern the District Committee and the Town Councils of Alloa, Alva and Tillicoultry. Dollar Town Council has a separate scheme.

On 30th December, 1925, the Board issued a Form of Statistics to be furnished annually in the Annual Report of the Medical Officer of Health. The figures given below relate to the Central Committee's Scheme, while, in order to avoid the necessity of further printing, the figures relating to the Dollar Scheme are shown in brackets.

#### **1. Infant Mortality.—**

- (a) Number of deaths: County District, 21; Alloa, 16; Alva, 7; Tillieoultry, 4; [Dollar, 0.]. See Tables VII. to XI. of Appendix.
- (b) Rate per 1000 births: See Table I. of Appendix.
- (c) Causes of death: See Tables VII. to XI. of Appendix.

#### **2. Births.**

- (a) Number Registered: (1) Legitimate: County District, 196; Alloa, 254; Alva, 73; Tillieoultry, 46; [Dollar, 20]. (2) Illegitimate: County District, 16; Alloa, 11; Alva, 2; Tillicoultry, 2; [Dollar, 2].
- (b) Number notified: County District, 162; Alloa, 206; Alva, 75; Tillieoultry, 44; [Dollar, 20].
- (c) Number attended by Midwives: County District, 36; Alloa, 140; Alva, 0; Tillieoultry, 9; [Dollar, 0].

The others notified were all attended by Doctors

- (d) Number of Still births: County District, 7; Alloa, 3; Alva, 4; Tillicoultry, 1; [Dollar, 0].

#### **3. Maternal Mortality.—**

- (a) Number of deaths resulting from miscarriage or childbirth: Alva, 1.
- (b) Number of deaths resulting from Puerperal Sepsis: None.

#### **4. Report under Midwives (Scotland) Act, 1915.—**

Detailed reports have been forwarded to the

Central Midwives' Board for Scotland, the Scottish Board of Health, the County Central Committee for Maternal and Child Welfare and the Town Council of Dollar. They may be summarised as follows:—Midwives giving notice of intention to practise: County District, 2; Alloa, 7; Alva, 1; Tillicoultry, 2; [Dollar, 0].

Births attended by midwives, 180. [Dollar 0].

Cases of Ophthalmia Neonatorum, 1 (attended by a midwife). [Dollar, 0].

Cases of puerperal sepsis, 3 (1 attended by a midwife). [Dollar, 0].

Cases of still-birth, 16 (1 attended by midwife). [Dollar, 0].

Cases in which midwives had to call in the services of a doctor, 12.

No disciplinary action was required and the Act worked smoothly.

The Health Visitors made 39 inspections of midwives and paid 2 visits to them for other reasons.

#### 5. Home Visitation.—

The following Table gives particulars of the Health Visitors' visits to children during 1925.

	County District	Alloa	Alva	Tillicoultry	Total	Dollar
1. Infants.						
(a) Number of First Visits	212	258	77	51	598	21
(b) Number of Revisits	1761	2316	1539	1556	7172	180
(c) Number of Infants (at age of 6 months)						
(1) Breast Fed	...	...	...	...	430	3
(2) Part Breast Fed	...	...	...	...	76	...
(3) Artificially Fed	...	...	...	...	159	12
(d) Number of Infants born						
(1) Prematurely	...	...	...	...	...	...
(2) At full time	...	...	...	...	...	18
2. Children (1-5 years)						
(a) Number of First Visits	415	330	323	346	1414	0
(b) Number of Revisits	2566	2745	929	1248	7498	101
3. Expectant Mothers						
(a) Number of First Visits	...	...	...	...	219	27
(b) Number of Revisits	...	...	...	...	285	35
(c) Number who consulted a doctor or ante-natal clinic	...	...	...	...	67	...

## 6. Voluntary Health Visitor's Report.—

There is only one Voluntary Health Visitor. She made visits in Tullibody and Cambus. A number of ladies gave voluntary assistance at the Welfare Centres and Alloa Day Nursery. Without their valued help the work could not be carried on except by increasing the staff.

7, 8, 9 and 23. **Welfare Centres** are established at Alloa, Alva and Tillicoultry, at each of which a meeting is held once a week. A doctor attends for 1 to 1½ hours twice each month at the Alloa Centre and once each month at Alva and Tillicoultry Centres, when **ante-natal, post-natal and child welfare consultations** are held. At the other meetings Health Talks and Sewing and Cookery Demonstrations are arranged to form a course on **Mothercraft**. The attendances at the Welfare Centres were as follows:—

- (7) Ante-natal Consultations.—5 attendances by expectant mothers.
- (8) Post-natal Consultations.—25 attendances by mothers.
- (9) Child Welfare Consultations.—

	Alloa.	Alva.	Tillicoultry.
Number of Medical Consultations	21	12	10
(a) Total number of attendances			
(1) Under 1 year of age	724	115	152
(2) Over 1 year of age	553	165	185
(b) Number of First Attendances			
(1) Under 1 year of age	47	16	30
(2) Over 1 year of age	43	10	17
(c) Illnesses recorded — Digestive disturbances, bronchial affections, hernia, skin affections. Rickets is not prevalent, although a few cases were noted.			

(23) The **educational** side of the work is dealt with at the Mothercraft meetings of which there were 21 in Alloa, 29 in Alva and 33 in Tillicoultry. The attendances of mothers were:—Alloa, 1087; Alva, 525; Tillicoultry, 1034. The children accompany their mothers at these meetings and are thus regularly under the observation of the Health Visitors and Voluntary Helpers. They are weighed at regular intervals.

## 10. Special Treatment Centres.—

There are no Centres but arrangements are made for



special treatment when necessary.

- (1) Teeth.—One child.
- (2) Eyes.—By arrangement with the Education Authority, the Child Welfare Committee sends cases to the School Eye Clinic. Seven cases were treated there. 1 case was treated at Stirling Infirmary.
- (3) Other Ailments.—The Health Visitors have continued to attend to minor ailments at Alloa Day Nursery and the school clinics at Alva and Tillincaultry. Medical cards are issued to enable necessitous cases to attend a doctor.
- (4) Provision of Insulin.—No cases were reported requiring insulin.

#### 11. Day Nurseries, etc.—

There is a Day Nursery in Alloa which accommodates up to 30 children (5 under 1 year and 25 over 1 year).

(a) Number of Attendances—				
(1) Under 1 year of Age	...	...	...	1001
(2) Over 1 year of Age	...	...	...	4049
				<hr/>
				5050
(b) Charges made—				
3617 Attendances at 5d	...	...	£75	7 1
944 Attendances at 4d	...	...	£15	14 8
489 Attendances at 3d	...	...	£6	2 3
				<hr/>
5050			£97	4 0
(c) Receipts	...	...	...	£96 5 8

#### 12. Food and Milk.—

- (a) Number of Applications for food or milk—
  - (1) Mothers, 30. [Dollar, 4].
  - (2) Children, 85. [Dollar, 7].
- (b) Number of Cases certified on medical grounds as requiring food or milk—
  - (1) Mothers, 28. [Dollar, 4].
  - Children, 84. [Dollar, 7].
- (c) Number of Cases under (b) Certified as Necessitous—
  - (1) Mothers, 28. [Dollar, 4].
  - (2) Children, 84. [Dollar, 7].

- (d) Gross Cost, £141 4s. [Dollar, £8 15s 11].  
Sums recovered, Nil.
- (e) Information as to supply of milk substitutes—  
Dried milk, Virol and other suitable proprietary preparations are sold at or about cost price at the Health Centres.
- 13 and 14 **Measles and Whooping Cough.**—
- (a) These diseases are not notifiable in the County.  
An epidemic of whooping cough occurred.
  - (b) Number of Deaths—Measles, 0; Whooping Cough, 6. [There were none in Dollar].
  - (c) Number of cases removed to Hospital, None.
  - (d) Numerous domiciliary visits were made by the Health Visitors (no record was kept).
  - (e) No special staff was required.
15. **Ophthalmia Neonatorum.**—One case notified by a doctor.
16. **Epidemic Diarrhoea.**—  
No epidemics occurred.
17. **Maternity Hospitals.**—  
There is none in the County. One case was successfully treated at the County Hospital, Alloa, by induction of labour. On a previous occasion Caesarean Section was required in this particular case.
18. **Homes for Unmarried Mothers.**—  
No cases were sent to such Homes.
19. **Hospitals for Sick Children.**—  
Fourteen children were admitted to various Hospitals, including the Hospitals for Sick Children, Glasgow and Edinburgh, and the local Hospitals.
- 20, 21 and 22. **Convalescent Homes, Boarding-out, Home Helps.**—There is nothing to report about these matters.
23. **Educational.**—  
See under Welfare Centres above.
24. **Agencies Associated with Scheme.**—  
The Committees keep in touch with Parish Councils and public voluntary agencies which deal with welfare work.
25. **Other Provisions.**—  
Cases of pneumonia are admitted to the County Fever Hospital if accommodation is available.

### Milk Supply.

The administration of the Milk and Dairies (Scotland) Act, 1914, the provisions of which came into force on 1st September, 1925, was not fully developed by the end of the year. This delay was due chiefly to the difficulties experienced in the appointment of a Veterinary Inspector as a full time official for a combination of the Local Authorities in this and the adjoining Counties. Since the end of the year the difficulties have been removed by the Board of Health allowing the appointment of a part-time official and Mr George C. Inglis, M.R.C.V.S., has been appointed Veterinary Inspector for all the Local Authorities within this County. New Dairy Bye-laws have been framed and submitted to the Board for approval, while Regulations for regulating the duties of the Veterinary Inspector have been made and have been approved by the Board. All Dairies have been registered under the Act, placards dealing with Infectious Diseases have been issued to Dairymen, arrangements have been made with the Royal Dick Veterinary College for bacteriological examinations under the Act, and a Committee to administer the Act has been appointed by each Local Authority. As regards details, the supervision, inspection and the keeping of registers of the Dairies are in charge of the Sanitary Inspectors so far as the premises are concerned and in charge of the Veterinary Inspector so far as the animals are concerned, while the Medical Officer of Health has general supervision over the whole administration of the Act. All the Local Authorities in the County have authorised the inspection of premises, and the examination of cattle in such premises, which are not dairies within the meaning of the Act, but from which the occupier sells milk in small quantities and for their own consumption to persons in his employment or to neighbours.

A good deal of work has been required of me to get all the details of Bye-Laws, Regulations, and certain resolutions required under the Act made uniform by the five Local Authorities within the County, and I have to thank all the Local Authorities for adopting my recommendations in order to obtain this uniformity and thus avoid irritating differences of detail in the administration of the Act by each Local Authority.

All dairy farms and milk shops were inspected as usual and some improvement in some of them were effected as a result. No licences for the sale of graded milk were issued and no infringe-

ments of the Condensed Milk and Dried Milk Regulations were detected.

### **Inspection of Food.**

The usual inspections of meat and other articles of food were carried out by the Medical Officer, Veterinary Officer and Sanitary Inspectors under Section 43 of the Public Health (Scotland) Act. The nature and quantity of unsound food seized and destroyed has been reported on by the Sanitary Inspectors. There is still room for much improvement in the methods of storing articles of food in shops and stores, especially as regards protection from flies and dust.

Under the Public Health (Meat) Regulations (Scotland), 1924, annual returns of the work done are sent to Local Authorities and the Board of Health by the Veterinary Officer appointed as Meat Inspector. The M.O.H. is also appointed a Meat Inspector to deal with urgent work when the services of the Veterinary Officer cannot be obtained.

### **Laboratory.**

Most of the work is now sent to Laboratories in Edinburgh as the M.O.H. has little time to do it at the County Buildings, Alloa. Any urgent specimens are, however, examined by the M.O.H. in Alloa, in order to save time, e.g., at week-ends when delay in transmission by post is unavoidable.

### **Other Matters.**

The usual inspections were made under the Rag Flock Act, all persons found using rag flock being in possession of the usual certificate regarding its cleanliness from the makers.

Arrangements are in force for the supply of diphtheria anti-toxin and anti-tetanic serum to necessitous cases free.

## **Clackmannan County District.**

Public Health matters affecting the District in common with the Burghs in the County are dealt with in the preceding section of this report.

**Water Supply.**—The main County supply from Lossburn and the Inchna Burn No. 2 has been satisfactory as regards quantity although occasional complaints regarding the colour of the water after heavy rains have been received. To get over this difficulty,

the Committee has instructed the Waterman to shut off the Inch-na supply and use the water from Lossburn Reservoir at such times. The filters are still not in use as, owing to their level, sufficient pressure to supply the high points of the district cannot be obtained when they are in use. The installation of mechanical high pressure filters of the closed type would allow the necessary pressure to be maintained but perhaps some chemical precipitant would be required to remove the peaty colour complained of. However, as the water is a safe one from the public health point of view the presence of a little coloration or a few of the natural inhabitants of upland surface waters occasionally need not give rise to any alarm while it remains unfiltered. The question of filtration and of increasing the main piping to the district is still under the consideration of the Water Committee. The Coalsnaughton and Devonside water supply and the Keilarsbrae and Hallpark water supply, the leases of which are approaching termination, are also under review by the Water Committee. Complaints were received regarding the dark coloration of the water at Clackmannan water works, which is received from Alloa high service reservoir. These complaints were made during the scrapping of the old pumping plant and the erection of a new one at Alloa water works, during which time it was sometimes necessary to use raw water from the Black Devon before it had been stored and settled in Gartmorn Dam. The cause of these complaints has been removed and the new pumping plant is working well. During this same period complaints were received from the inhabitants of 10 houses at Helensfield, near Clackmannan. Their water supply is the same as that to Clackmannan water works but it is not filtered whereas the Clackmannan supply is, before it reaches the consumers. Filtration of this water will be required before it can be considered satisfactory, but Helensfield is not in a special water district, and the inhabitants have water connections to the unfiltered supply only during the pleasure of the Alloa Town Council and on payment of a small fee. The water supply to Lower Mains, Dollar, is now satisfactory. The eastern part of the County, comprising Forestmill and several farms, has not a satisfactory supply and the fact that Alloa Town Council has decided not to take water from Glen Devon removes one of the possible solutions of this difficult problem.

**General Sanitary Matters.**—Mr Scott, Sanitary Inspector,



has reported upon these matters and there is no need to detail them here. I have satisfied myself that the general sanitary condition of the District is fairly good, and that progress has been made in the abolition of the middens and in improved scavenging. Attention to the repair of roadways, not scheduled as highways, in some of the villages would lead to greater cleanliness being maintained in the neighbourhood of certain habitations.

**Factory and Workshop Act, 1901.**—Eight inspections of factories, 39 of workshops, and 17 of work-places were made. Only one defect was found, being a nuisance under the Public Health Acts namely, want of cleanliness. The defect was remedied. A tabular statement has been forwarded to the Home Office, the Scottish Board of Health, and the District Committee.

**Housing.**—There is still a definite shortage of suitable working class dwellings in the District but it is difficult to estimate the exact number of new houses required to remove it. The original State-aided Housing Scheme was only finished during the year by the completion and occupation of the Tullibody houses after many delays. That Scheme, comprising 16 houses, has catered only for the higher paid workers and, in order to meet the urgent needs of the lower paid working classes, another Scheme under the Housing (Financial Provisions) Act, 1924, has been prepared and submitted to the Board of Health for its approval. This new Scheme provides smaller houses with lower rents, and the District Committee representatives from each district in the County have indicated the number of houses which they consider, after local enquiry, are necessary to meet the needs of each district. The Scheme, which has received the approval of the Board since the end of the year, consists of eight 3-roomed houses and sixteen 2-roomed houses at Clackmannan, twelve 3-roomed and eight 2-roomed houses at Sauchie, four 3-roomed and eight 2-roomed houses at Menstrie, four 3-roomed and four 2-roomed houses at Coalsnaughton and four 2-roomed houses at Devonside, in all 28 houses of 3 rooms and 40 houses of 2 rooms. When this Scheme is completed the urgency of the housing problem will be relieved, but it is probable that another similar scheme will be required within a few years to allow of the closing of some houses which, through lack of attention, will soon be unfit for habitation. The habitability of many houses is of a low standard and it will be necessary to have some of them closed to allow reconstruction or

suitable repairs to be carried out. Until new houses are available this is impossible, and the same applies to the problem of overcrowding which is still too prevalent. In the meantime, repairs and alterations are called for wherever they are practicable without eviction of the tenants. There is no scheme under consideration for the improvement of insanitary areas under Part II. of the Housing (Scotland) Act, 1925, and there is no urgency for any in the meantime. An estimate of the number of houses required at 31st December, 1925, to meet the needs of the District (including houses required to replace houses at present occupied that should be closed and demolished) might be placed roughly at 120. The new Scheme now under construction will produce 68 of this number and thereafter a more accurate estimate can be made.

Under the Housing (Inspection of District) Regulations, 1910, 79 dwelling houses were inspected, of which 18 were considered to be unfit for human habitation. Of these, 14 were remedied without the making of closing orders or action under Section 3 (1) of the Housing (Scotland) Act, 1925. Fifty-five notices were given as to insufficient water-closet accommodation. The requirements were complied with in 20 cases, while 35 cases were pending at the end of the year. No houses of one apartment or two apartments were erected during the year. The number of houses erected by private enterprise and for which a subsidy was claimed was five.

**The Slaughter-Houses** were regularly inspected and found satisfactory as a rule. Warning as to more careful cleansing of implements and tables had to be given at times.

**Infectious Diseases.**—The number of cases notified was 64 compared with 85 last year, 98 in 1923, and 66 in 1922. Particulars will be found in Table II. of the Appendix.

**Vital Statistics.**—The birth-rate was 19.9 per 1000 population compared with 21.3 for Scotland. There has been a general fall in the birth-rate since 1920. The illegitimate birth-rate per 100 total births was 6.6 compared with 6.6 for Scotland. The death-rate was 11.3 compared with 13.4 for Scotland. The infantile death-rate was 103 compared with 91 for Scotland. It was 33 higher than the mean of the rates for the preceding 5 years and the increase was due largely to deaths from respiratory diseases. The death-rates from tuberculosis and the principal epidemic diseases are much lower than the same rates for Scotland. Details of the various rates will be found in Table I. of the Appendix. Of

the 213 children whose births were registered, 14 were illegitimate, 113 were males and 100 were females. There were 121 deaths, 64 of males and 57 of females. Of these, 29 were children under 5 years of age (22 of them under 1 year) and 42 were of persons over 65 years of age, leaving 50 (or 41.3 per cent. of the total deaths) who died between the ages of 5 and 65 years. The principal causes of death were:—Heart Disease, 14; Malignant Tumours, 13; Apoplexy, 13; Tuberculosis, 7; Diseases of early infancy, 10; Violent deaths, 5; Disease or accident connected with child-birth, 0; Bronchitis, 8; Pneumonia, 12.

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## Burgh of Alloa.

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Public Health matters affecting the Burgh in common with other districts in the County are dealt with in the first section of this Report, headed "Clackmannanshire."

**Water Supply.**—After very careful and mature consideration the Town Council unanimously decided not to exercise its option to acquire a share of the water from Glendevon Waterworks. A public meeting of ratepayers was also held to discuss the question when the decision was unanimously endorsed. Needless to say, a great deal of enquiry and inspection extending over a period of years, was carried out before the decision was arrived at. Special notes were prepared for the information of the Council by the Town Clerk, the Town Chamberlain, the Water Engineer and myself, and a copy of my notes is printed in the Appendix of this report for reference. The new sewage works of the Special Drainage District of Steelend and Saline were completed and the resultant effluent is a great improvement on the effluents from the former purification works. Still, although this effluent is clear like clean water it contains a large amount of organic matter in solution and the question of its disposal otherwise than into the Black Devon is a matter for future consideration. The pollution from Steelend Pit is a recurring nuisance which must be dealt with and it is hoped that improvements will be carried out there shortly. The new pumping plant has been installed at Gartmorn Dam and now ensures a supply of stored and safe water at all times to the town. There should no longer be any need to pass the raw unsatisfactory



water direct from the Black Devon to the filters. Throughout the year the water was ample in quantity for all purposes.

**General Sanitary Matters.**—The Sanitary Inspector deals fully with drainage, scavenging, nuisances and the usual inspections under various Acts and Regulations in his Annual Report.

**Factory and Workshops Act, 1901.**—129 inspections of factories, workshops and work-places were made by the Medical Officer and the Sanitary Inspector and his staff. 18 defects were found, all being nuisances under the Public Health Acts, and all of them were remedied. A tabular statement has been forwarded to the Home Office, the Board of Health and the Town Council.

**Housing.**—There is ample evidence of an insufficiency of working class dwellings and also of the existence of many dwellings in a condition rendering them unfit for human habitation. The amount of overcrowding is becoming worse than formerly, and the only solution of these problems is the erection of more houses suitable for the needs of the working classes. Until new houses are available any action that can be taken as regards insanitary property and overcrowding is only a makeshift. Under the special scheme for the erection of houses to allow of slum clearances 16 new houses were occupied by former tenants of condemned houses and other 36 houses were in course of construction at the end of the year. A scheme for the erection of 120 houses (28 of 2 rooms, 72 of 3 rooms and 20 of 4 rooms) under the Housing (Financial Provisions) Act, 1924, was provisionally sanctioned by the Board of Health. These new houses should materially improve the housing conditions in the town for which I estimate roughly that, at 31st December, 1925, fully 200 new houses are required to adequately meet its needs.

Under the Housing (Inspection of District) Regulations, 1910, 162 houses were inspected, of which 67 were considered to be unfit for habitation, and in 26 of which closing orders were deemed to have become operative under Section 3 (1) of the Housing (Scotland) Act, 1925. The Town Council gave consent for the erection of 24 houses of 2 apartments during the year.

**The Slaughter-house** has been regularly inspected and found in good order and well-conducted. Its extension and the provision of cold storage are matters for consideration.

**Port Sanitary Authority.**—No work was required during the

year regarding "suspected" or "infected" ships.

**Infectious Diseases.**—The number of cases notified was 100 compared with 137 in 1924, 105 in 1923 and 134 in 1922. Particulars will be found in Table III. of the Appendix.

**Vital Statistics.**—Details of the principal rates will be found in Table I. of the Appendix. The birth-rate was 19.9 compared with 21.3 for Scotland. The illegitimate birth-rate per 100 total births was 4.2 compared with 6.6 for Scotland. The death-rate was 11.1 compared with 13.4 for Scotland. The infantile death-rate was 61 compared with 91 for Scotland. The death-rate from pulmonary tuberculosis was 0.53 compared with 0.76 for Scotland, while the corresponding rates from non-pulmonary tuberculosis were 0.07 and 0.34. The death-rate from the principal epidemic diseases is 0.53 compared with 0.84 for Scotland. Of the 263 children whose births were registered 11 were illegitimate, while 128 were males and 135 were females. There were 147 deaths, 82 of males and 65 of females. Of these, 23 were of children under 5 years of age (16 of them under 1 year) and 57 were of persons over 65 years of age, leaving 67 (or 45.5 per cent. of the total deaths) of persons who died between the ages of 5 and 65 years. The principal causes of death were:—Heart Disease, 18; Apoplexy, 23; Tuberculosis, 8; Malignant Tumours, 19; Violent Deaths, 6; Disease or Accident connected with child-birth, 0; Bronchitis, 5; and Pneumonia, 9.

## Burgh of Alva.

Public Health matters affecting the Burgh in common with other parts of the County have been dealt with in the first section of this Report.

**General Matters.**—The usual inspections showed that the water supply, drainage system and scavenging of the Burgh were all in order. Several minor nuisances were dealt with. The dairies, slaughter-houses, butchers' shops and ice-cream shops were all found quite satisfactory. An outstanding feature in the agencies which tend towards the better health of the inhabitants has been the development within the last few years of facilities for outdoor recreation such as the McArthur Braes and the Cochrane

Park provide. The Town is now equipped in generous measure with tennis courts, bowling greens, putting greens and a golf course, and, with the natural beauties of its neighbourhood made more easily accessible through picturesque grounds and its attractions for the hill climber, it should become more widely known and patronised as a holiday resort.

**Factory and Workshops Act.**—Eighteen inspections of factories, 62 of workshops and 7 of workplaces were made. No written notices or prosecutions were required. Only one defect, namely, want of drainage of floors, was found, and was remedied.

**Housing.**—The need for the erection of more working class dwellings is still obvious, and an approximate estimate of the number required at 31st December, 1925, to adequately meet the needs of the town is sixty houses. A scheme for the erection of 30 houses under certain conditions was decided upon by the Town Council towards the end of the year. The scheme as approved by the Board of Health since the end of the year consists of 16 two-roomed houses of the flatted type and 14 three-roomed houses, 12 of the flatted type and 2 of the cottage type. These houses will be built in Queen Street, George Street and Beauclere Street. The original housing scheme under the Housing Act of 1919 consisted of 40 houses, which have now been occupied for some years. From these figures it will be seen that the housing problem is receiving attention.

Under the Housing (Inspection of Districts) Regulations, 1910, 41 houses were inspected, of which 2 were classed as unfit for habitation but in which the defects were remedied without the making of closing orders. Intimation was given as to insufficient water-closet accommodation in 16 cases, in 2 of which the requirements were complied with by owners.

**Infectious Diseases.**—The total number of cases notified was 31, compared with 74 last year, 11 in 1923 and 26 in 1922. Full details will be found in Table IV. of the Appendix.

**Vital Statistics.**—The various rates are detailed in Table I. of for Scotland. The illegitimate birth-rate per 100 total births is only 2.7 compared with 6.6 for Scotland. The death-rate was 15.7 compared with 13.4 for Scotland. This rate of 15.7 is corrected for transfers of the deaths of Alva people who died else-

where, but the actual rate without correction is 13.4 and the rate corrected for Transfers and adjusted for Age and Sex Distribution is 14.7. The infantile death-rate was 96 compared with 91 for Scotland. The death-rate from pulmonary tuberculosis was 0.76 compared with 0.76 for Scotland, while the corresponding rates from non-pulmonary tuberculosis were 0.00 and 0.34. The epidemic disease death-rate was 1.52 compared with 0.84 for Scotland. the unusually high rate being due to whooping cough. Of the 75 children whose births were registered, 2 were illegitimate, while 45 were males and 30 were females. There were 62 deaths, 31 of males and 31 of females. Of these 11 were of children under 5 years of age (7 of them under 1 year) and 25 were of persons over 65 years of age, leaving 26 (or only 41.9 per cent. of the total deaths) of persons who died between 5 and 65 years of age. The principal causes of death were:—Heart Disease, 9; Malignant Tumours, 3; Apoplexy, 8; Whooping Cough, 4; Bronchitis, 0; and Pneumonia, 7. Disease or accident connected with child birth, 1.

## Burgh of Tillicoultry.

Several matters relating to the Public Health of the Burgh in common with other parts of the County are dealt with in the first section of this Report under the heading "Clackmannanshire."

**General Matters.**—No complaints regarding the water supply were received by me and the drainage system and its purification works were kept in good order. Scavenging and removal of refuse was carried out satisfactorily. Dairies, butchers' shops and other premises connected with the sale or storage of food were regularly inspected by the Assistant Sanitary Inspector and were found satisfactory when visited by me. The new slaughter-house built by the Co-operative Society was opened and has every facility for being kept in a satisfactory condition. The Society is to be complimented upon this much-needed improvement.

**Factory and Workshops Act.**—Eleven inspections of factories, 70 of workshops and 3 of workplaces were made, but no written notices or prosecutions were required. Only one defect was found and remedied, namely, insufficient sanitary accommodation.

**Housing.**—The housing scheme under the Housing (Financial

Provisions) Act, 1924, mentioned in last report was approved by the Board of Health. It is situated north of Walker Terrace and consists of 12 two-roomed houses of the flatted type and 8 three-roomed houses of the cottage type. Several houses were completed during the year and the remainder should soon be ready for occupation. These houses, together with those built under the Act of 1919, should go a long way towards meeting the needs of the Town and I estimate that the provision of other 20 houses would enable the Town Council to deal adequately with cases of overcrowding and the closure of houses unfit for human habitation. Not being the designated officer under the Housing Acts, I cannot give the details required under the Inspection of District Regulations, 1910, but, as Medical Officer of Health, I inspected 10 houses and found all of them fit for habitation.

**Infectious Diseases.**—The total number of cases notified was 13 compared with 32 last year, 23 in 1923 and 24 in 1922. Particulars will be found in Table V. of the Appendix.

**Vital Statistics.**—The birth rate is 15.8 compared with that of 21.3 for Scotland and is much lower than the average rate. The illegitimate birth-rate per 100 total births was 4.2 compared with 6.6 for Scotland. The death-rate was 21.0 compared with 13.4 for Scotland and is higher than usual. The infantile death-rate was 83 compared with 91 for Scotland. The death rate from Pulmonary Tuberculosis was 0.66 compared with 0.76 for Scotland, while the corresponding rates for Non-pulmonary tuberculosis were 0.33 and 0.34. The death rate from the principal epidemic diseases is 0.66, compared with 0.84 for Scotland. Of the 48 children whose births were registered, 2 were illegitimate, 26 were males and 22 were females. There were 64 deaths, 35 of males and 29 of females. Of these, 7 were children under 5 years of age (4 of them under 1 year), and 33 of persons over 65 years of age, leaving 24 (or 37.5 per cent. of the total deaths) of persons who died between the ages of 5 and 65 years. The principal causes of death were:—Heart Disease, 12; Apoplexy, 9; Malignant Tumours, 8; Tuberculosis, 4. There were no deaths connected with child-birth.

## Burgh of Dollar.

In the first section of this report will be found details of Pub-



lic Health matters which affect the Burgh in common with other parts of the County.

**General Matters.**—The alterations at the water works were completed and the works were formally opened on 17th October. The old water tank at New Castle Road, which had a capacity of 5000 gallons, has been replaced by a tank of 75,000 gallons capacity which is fed by two filters with a filtering area of 200 square yards in place of the old filter with an area of 16 square yards. The old tank at Broomieknowe for the supply of the Old Town, and which had a capacity of 7,500 gallons, has been replaced by a new tank of 25,000 gallons capacity. The filtered water is pumped from the lower system to the high service system by an up-to-date pumping plant in duplicate. One set is electrically driven while the other is worked by a gas engine, and either one is capable of meeting the normal requirements. In emergency, e.g., on the occasion of a fire, both sets can be worked at the same time. The electric pump can be automatically controlled so that, when the tank at Broomieknowe is filled, the pump stops working. The water supply is now in a very satisfactory condition with the exception of some leakage in the distribution system. It is hoped that this leakage will soon be traced and remedied. The Town Council are due the thanks of the inhabitants for the able manner in which they have dealt with the water question. Mr Proudfoot, the Engineer, has certainly designed an excellent water supply system, in the production of which I might be excused for claiming a small share, as he modified his original plans to some extent after consultation with me.

The drainage and scavenging have been carefully managed and no complaints regarding them have been received. The free coup on the Tilliecultry Road might, with advantage, have more attention paid to it as regards the burning of papers, top dressing with earth and the destruction of rats. The usual inspections of dairies, bake-houses, butchers' shops, the slaughter-house and the sewage farm were carried out. There is nothing of importance to report regarding them.

**Factory and Workshops Act.**—Twenty inspections of workshops were made. One defect was found and was remedied, namely, want of cleanliness.

**Housing.**—No new housing schemes were formulated during

the year. Four houses were inspected under the Housing (Inspection of District) Regulations, 1910, and all were considered to be fit for human habitation.

**Maternity Service and Child Welfare.**—The figures and statistics relating to the scheme administered by Dollar Town Council have been included (in brackets) with those of the Central Committee's scheme, reported upon in the first part of this report (page 12). This has been done in order to avoid duplication of printing.

**Infectious Diseases.**—The total number of cases notined was 5 compared with 14 last year, 13 in 1923 and 8 in 1922. Details will be found in Table IV. of the Appendix.

**Vital Statistics.**—The birth-rate was 13.2 compared with 21.3 for Scotland. The death-rate was 13.8 compared with that of 13.4 for Scotland, but, when corrected for Transfers and adjusted for Age and Sex Distribution, the death-rate was only 10.7. There were no deaths under 1 year of age, and none from tuberculosis or epidemic diseases. Of the 21 children whose births were registered, 11 were males and 10 were females. Two were illegitimate. Of the 22 persons who died, 11 were males and 11 females. All were over 45 years of age and 15 of them were over 65 years of age. Two were over 85 years. The principal causes of death were:—Heart Disease, 7; Apoplexy, 3; Malignant Tumours, 4. There were no deaths connected with child-birth.





# APPENDIX.



## VITAL STATISTICS

RETURN OF INFECTIOUS DISEASE

INFANTILE MORTALITY RETURNS

FOR 1925

AND

NOTES ON ALLOA WATER SUPPLY.

TABLE I.

	Births per 1000 population.		Deaths per 1000 population		Deaths under 1 year per 1000 Births.		Deaths from Tuberculosis per 1000 population.				Deaths from Epidemic Disease per 1000 population.	
	1925.	Mean of Preceding 5 years.	1925.	Mean of Preceding 5 years.	1925.	Mean of Preceding 5 years.	Pulmonary Tuberculosis (Phthisis).		Non-Pulmonary Tuberculosis.		1925.	Mean of Preceding 5 years.
							1925.	Mean of Preceding 5 years.	1925.	Mean of Preceding 5 years.		
Clackman's County Dis.	19.9	25.0	11.3	12.6	103	70	0.37	0.54	0.28	0.28	0.47	0.43
Alloa Burgh -	19.9	25.9	11.1	14.3	61	86	0.53	0.92	0.07	0.49	0.53	0.62
Alva Burgh -	18.5	23.1	15.7	16.0	96	63	0.76	1.05	0.00	0.15	1.52	0.64
Tillicoultry Burgh -	15.8	23.2	21.0	14.9	83	82	0.66	0.59	0.33	0.27	0.66	0.39
Dollar Burgh -	13.2	14.6	13.8	13.7	0	24	0.00	0.51	0.00	0.13	0.00	0.28
Clackmannanshire -	19.0	24.5	12.7	13.8	79	75	0.52	0.75	0.15	0.34	0.61	0.52
Scotland -	21.3	24.3	13.4	13.9	91	92	0.76	0.82	0.34	0.36	0.84	0.92

NOTE.—All the above ratios are corrected for transfers.



Acute Primary Pneumonia,  
Acute Influenzal Pneumonia,  
Pulmonary Tuberculosis,  
Non Pulmonary Tuberculosis,

Total of A and B.	64	..	13	29	13	6	2	1	51	13	1
1	5	3	1	2	2	1	..	..	2	3	1
..	..	..	..	..	2	..	..	..	..	3	..

C. Diseases to which the Provisions of the Infectious Disease (Notification) Act have been  
extended in the Local Authority.

Acute Anterior Poliomyelitis,  
Cerebro Spinal Fever,

..	..	..	..	..	..	..	..	..	..	..	..
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STATE NAME OF HOSPITAL, OR HOSPITALS IN WHICH CASES WERE TREATED.

Chackumunshire Combination Infectious Diseases Hospital, Allon,  
Tuberculosis Pavilion at Infectious Diseases Hospital, Allon,  
Ochil Hills Sanatorium, Milnathort.

TABLE II—RETURN OF CASES OF INFECTIOUS DISEASE NOTIFIED, &c., DURING THE YEAR  
ENDING 31st DECEMBER, 1925.

COUNTY OF CLACKMANNAN, DISTRICT OF CLACKMANNAN COUNTY.

NUMBER OF CASES COMING TO THE KNOWLEDGE OF THE MEDICAL  
OFFICER OF HEALTH.

NUMBER OF CASES COMING TO THE KNOWLEDGE OF THE MEDICAL OFFICER OF HEALTH.										
DISEASE.	At all Ages.		At Age—Years.						Cases re-moved to Hos-pital.	Cases not re-moved to Hos-pital.
	Under 1.	1 and under 5	5 and under 15.	15 and under 25.	25 and under 45	45 and under 65.	65 and upwards.			

Cases notified in a previous  
year and removed to Hospital  
for the first time during 1925

A.—DISEASES SPECIFIED IN THE INFECTIOUS DISEASE (NOTIFICATION) ACT, 1889.

Typhoid or Enteric Fever, ...	...	...	...	...	...	...	...	...	...	...	...
Typhus Fever, ...	...	...	...	...	...	...	...	...	...	...	...
Smallpox, ...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever or Scarlatina, ...	...	32	...	...	...	...	...	...	...	31	...
Diphtheria and Membranous Group, ...	...	...	...	...	...	...	...	...	...	14	...
Erysipelas, ...	...	14	...	...	...	...	...	...	...	2	...
Puerperal Fever, ...	...	4	...	...	...	...	...	...	...	1	...
Cholera, ...	...	1	...	...	...	...	...	...	...	1	...
Relapsing fever, ...	...	...	...	...	...	...	...	...	...	...	...
Continued Fever, ...	...	...	...	...	...	...	...	...	...	...	...

B.—DISEASES NOTIFIABLE IN TERMS OF REGISTRATION MADE UNDER SECTION 78 OF THE PUBLIC HEALTH

(SCOTLAND) ACT, 1897.









TABLE III—RETURN OF CASES OF INFECTIOUS DISEASE NOTIFIED, &c., DURING THE YEAR  
ENDING 31st DECEMBER, 1925.

COUNTY OF CLACKMANNAN, BURGH OF ALLOA.

NUMBER OF CASES COMING TO THE KNOWLEDGE OF THE MEDICAL  
OFFICER OF HEALTH.

NUMBER OF CASES COMING TO THE KNOWLEDGE OF THE MEDICAL OFFICER OF HEALTH.										
DISEASE.	At all Ages.		At Age—Years.						(uses re-moved to Hos-pital.	Cases not re-moved to Hos-pital.
	Under 1.	1 and 5 under 5.	5 and 15 under 15.	15 and 25 under 25.	25 and 45 under 45.	45 and 65 under 65.	65 and upwards.			

Cases notified in a previous year and removed to Hospital for the first time during 1925

A.—DISEASES SPECIFIED IN THE INFECTIOUS DISEASE (NOTIFICATION) ACT, 1889.

Typhoid or Enteric Fever, ...	2	...	1	...	1	...	2	...
Typnus Fever, ...	...	...	...	...	...	...	...	...
Smallpox, ...	34	...	9	24	1	...	33	1
Scarlet Fever or Scarlatina, ...	13	1	3	7	2	...	11	2
Diphtheria and Membranous Group, ...	9	...	1	1	4	2	3	6
Erysipelas, ...	1	...	...	...	...	...	1	...
Puerperal Fever, ...	...	...	...	...	...	...	...	...
Cholera, ...	...	...	...	...	...	...	...	...
Relapsing Fever, ...	...	...	...	...	...	...	...	...
Continued fever, ...	...	...	...	...	...	...	...	...

B.—DISEASES NOTIFIABLE IN TERMS OF REGULATIONS MADE UNDER SECTION 78 OF THE PUBLIC HEALTH







TABLE IV.—RETURN OF CASES OF INFECTIOUS DISEASE NOTIFIED, &c., DURING THE YEAR  
ENDING 31st DECEMBER, 1925.

COUNTY OF CLACKMANNAN, BURGH OF ALVA.

DISEASE.	NUMBER OF CASES COMING TO THE KNOWLEDGE OF THE MEDICAL OFFICER OF HEALTH.									
	At all Ages.	At Age—Years						Cases re-moved to Hos-pital.	Cases not re-moved to Hos-pital.	
		Under 1.	1 and 5 under	5 and 15 under	15 and 25 under	25 and 45 under	45 and 65 under			
							wards.			

Cases notified in a previous year and removed to Hospital for the first time during 1925

Cases notified in a previous year and removed to Hospital for the first time during 1925

A.—DISEASES SPECIFIED IN THE INFECTIOUS DISEASE (NOTIFICATION) ACT, 1889.

Typhoid or Enteric Fever, ...	...	...	...	...	...	...	...	...	...
Typhus Fever, ...	...	...	...	...	...	...	...	...	...
Smallpox, ...	...	...	...	...	...	...	...	...	...
Scarlet Fever or Scarletina, ...	22	...	8	12	2	...	...	22	...
Diphtheria and Membranous Croup, ...	1	...	...	...	1	...	...	1	...
Erysipelas, ...	1	...	...	...	...	...	1	...	1
Puerperal Fever, ...	...	...	...	...	...	...	...	...	...
Cholera, ...	...	...	...	...	...	...	...	...	...
Relapsing Fever, ...	...	...	...	...	...	...	...	...	...
Continued Fever, ...	...	...	...	...	...	...	...	...	...

B.—DISEASES NOTIFIABLE IN TERMS OF REGULATIONS MADE UNDER SECTION 78 OF THE PUBLIC HEALTH

(SCOTLAND) ACT, 1897.









TABLE V.—RETURN OF CASES OF INFECTIOUS DISEASE NOTIFIED, &c., DURING THE YEAR  
ENDING 31st DECEMBER, 1925.

COUNTY OF CLACKMANNAN, BURGH OF TILlicouLTRY.

NUMBER OF CASES COMING TO THE KNOWLEDGE OF THE MEDICAL  
OFFICER OF HEALTH.

DISEASE.

At all Ages.	At Age—Years							Cases re- moved to Hos- pital.	Cases not re- moved to Hos- pital.
	Under 1.	1 and 5	5 and 15.	15 and 25.	25 and 45.	45 and 65.	65 and up- wards.		

A.—DISEASES SPECIFIED IN THE INFECTIOUS DISEASE (NOTIFICATION) ACT, 1889.

Typhoid or Enteric Fever, ...	...	...	...	...	...	...	...	...	...
Typhus Fever, ...	...	...	...	...	...	...	...	...	...
Smallpox, ...	...	...	...	...	...	...	...	...	...
Scarlet Fever or Scarlatina, ...	...	...	...	...	...	...	...	...	...
Diphtheria and Membranous Group, ...	...	...	...	...	...	...	...	...	...
Erysipelas, ...	...	...	...	...	...	...	...	...	...
Puerperal fever, ...	...	...	...	...	...	...	...	...	...
Cholera, ...	...	...	...	...	...	...	...	...	...
Relapsing Fever, ...	...	...	...	...	...	...	...	...	...
Continued Fever, ...	...	...	...	...	...	...	...	...	...

Cases notified in a previous  
year and removed to Hospital  
for the first time during 1925







TABLE VI—RETURN OF CASES OF INFECTIOUS DISEASE NOTIFIED. &c.. DURING THE YEAR  
ENDING 31st DECEMBER, 1925.

COUNTY OF CLACKMANNAN, BURGH OF DOLLAR.

DISEASE.	NUMBER OF CASES COMING TO THE KNOWLEDGE OF THE MEDICAL OFFICER OF HEALTH.									
	At all Ages.	At Age—Years							Cases re-moved to Hos-pital.	Cases not re-moved to Hos-pital.
		Under 1.	1 and 5.	5 and 15.	15 and 25.	25 and 45.	45 and 65.	65 and upwards.		
Typhoid or Enteric Fever, ...	...	...	...	...	...	...	...	...	...	...
Typhus Fever, ...	...	...	...	...	...	...	...	...	...	...
Smallpox, ...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever or Scarlatina, ...	1	...	...	...	...	...	...	...	1	...
Diphtheria and Membranous Group, ...	2	...	...	...	...	...	...	...	...	...
Erysipelas, ...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever, ...	...	...	...	...	...	...	...	...	...	...
Cholera, ...	...	...	...	...	...	...	...	...	...	...
Relapsing Fever, ...	...	...	...	...	...	...	...	...	...	...
Continued Fever, ...	...	...	...	...	...	...	...	...	...	...

A.—DISEASES SPECIFIED IN THE INFECTIOUS DISEASE (NOTIFICATION) ACT, 1889.

Cases notified in a previous year and removed to Hospital for the first time during 1925



# Table VII—Infantile Mortality.

## CLACKMANNAN COUNTY DISTRICT.

	Under 1 Week.	1 Wk. and under 4 Wks.	4 Wks. and under 3 Mths.	3 Mths. and under 6 Mths.	6 Mths. and under 12 Mths.	Total.
Chicken-pox, ... ..	..	...	.	..	...	...
Measles, ... ..	..	...	..	...	..	...
Scarlet Fever, ... ..	..	..	...	...	..	...
Whooping Cough, ... ..	...	...	...	...	2	2
Diphtheria and Croup, ..	..	...	...	...	...	...
Erysipelas, ... ..	...	...	...	..	.	...
Tuberculous Diseases ...	...	...	...	.	..	...
Meningitis (not Tuberculous),...	..	...	...	...	...	..
Hydrocephalus, ... ..	...	...	...	...	...	...
Convulsions, ... ..	2	...	1	...	...	3
Pneumonia (all forms), ...	...	...	1	2	...	3
Bronchitis, ... ..	..	1	..	1	2	4
Diarrhoea and Enteritis, ...	..	...	..	..	...	...
Other Digestive Diseases, ...	..	...	...	...	1	1
Congenital Malformations, ...	1	...	...	...	...	1
Congenital Heart, ... ..	...	...	..	...	...	...
Premature Birth, ... ..	3	..	..	...	...	3
Atrophy, Debility, & Marasmus	1	1	..	1	...	3
Atelectasis, ... ..	...	...	...	...	...	..
Injury at Birth, ... ..	...	..	...	...	...	...
Suffocation, overlaying, ...	...	...	...	..	...	...
Syphilis, ... ..	...	...	...	...	.	...
All other causes, ... ..	1	...	...	...	...	1
Total, ... ..	8	2	2	4	5	21





# Table VIII—Infantile Mortality.

## ALLOA BURGH.

	Under 1 Week.	1 Wk. and under 4 Wks.	4 Wks. and under 3 Mths.	3 Mths. and under 6 Mths.	6 Mths. and under 12 Mths.	Total.
Chicken-pox, ...	...	...	.	.	...	...
Measles, ...	...	...	...	...	...	...
Scarlet Fever, ...	...	.	...	...	...	...
Whooping Cough, ...	...	...	...	1	...	1
Diphtheria and Croup, ...	...	...	...	...	1	1
Erysipelas, ...	...	...	...	..	.	...
Tuberculous Diseases ...	...	...	...	.	...	...
Meningitis (not Tuberculous)...	...	...	...	...	1	1
Hydrocephalus, ...	...	...	...	...	...	...
Convulsions, ...	...	1	...	...	...	1
Pneumonia (all forms), ...	...	...	1	1	1	3
Bronchitis, ...	...	...	1	.	1	2
Diarrhoea and Enteritis, ...	...	...	...	.	1	1
Other Digestive Diseases, ...	...	...	...	...	...	.
Congenital Malformations, ...	...	...	...	...	...	...
Congenital Heart, ...	...	...	...	...	...	...
Premature Birth, ...	1	..	1	...	..	2
Atrophy, Debility, & Marasmus	1	2	..	..	...	3
Atelectasis, ...	1	...	...	...	...	1
Injury at Birth, ...	...	..	...	...	...	...
Suffocation, overlaying, ...	...	...	...	.	...	...
Syphilis, ...	...	...	...	..	.	...
All other causes, ...	..	...	...	...	...	...
Total, ...	3	3	3	2	5	16



# Table IX—Infantile Mortality.

ALVA BURGH.

	Under 1 Week.	1 Wk. and under 4 Wks.	4 Wks. and under 3 Mths.	3 Mths. and under 6 Mths.	6 Mths. and under 12 Mths.	Total.
Chicken-pox, ... ..	..	...	.		...	...
Measles, ... ..	..	...	..	...	..	...
Scarlet Fever, ... ..	...	.	...	...	...	...
Whooping Cough, .. ...	...	...	1	1	1	3
Diphtheria and Croup, ..	...	...	...	...	...	...
Erysipelas, ... ..	...	...	...	..	.	...
Tuberculous Diseases ...	...	...	..	.		...
Meningitis (not Tuberculous),...	.	...	..	...	...	...
Hydrocephalus, ... ..	...	...	...	...	...	...
Convulsions, ... ..	...	...	...	..	...	...
Pneumonia (all forms). ...	...	...	...	...	...	...
Bronchitis, ... ..	...	...	...	.	...	...
Diarrhœa and Enteritis, ...	...	...	..	.	1	1
Other Digestive Diseases. ...	...	1	...	...	...	1
Congenital Malformations, ...	...	...	...	...	..	...
Congenital Heart, ... ..	1	...	..	...	...	1
Premature Birth. ... ..	1	..	...	...	...	1
Atrophy, Debility, & Marasmus	...	...	...	..	...	...
Atelectasis, .. ...	...	...	...	...	...	...
Injury at Birth. ... ..	...	..	...	...	..	...
Suffocation, overlaying. ...	...	...	...	..	...	...
Syphilis, ... ..	...	...	...	..	.	...
All other causes, ... ..	..	...	...	...	...	...
Total. ... ..	2	1	1	1	2	7



# Table X—Infantile Mortality.

## TILlicouLTRY BURGH.

	Under 1 Week.	1 Wk. and under 4 Wks.	4 Wks. and under 3 Mths.	3 Mths. and under 6 Mths.	6 Mths. and under 12 Mths.	Total.
Chicken-pox, ... ..	..	...	.	...	...	...
Measles, ... ..	..	...	...	...	.	...
Scarlet Fever, ... ..	...	.	...	...	..	...
Whooping Cough, ... ..	...	..	..	...	...	...
Diphtheria and Croup, ... ..	..	...	...	...	..	...
Erysipelas, ... ..	...	...	...	..	...	...
Tuberculous Diseases ... ..	...	...	...	..	...	...
Meningitis (not Tuberculous),...	..	...	...	...	...	...
Hydrocephalus, ... ..	...	...	...	...	...	...
Convulsions, ... ..	...	...	...	..	...	...
Pneumonia (all forms), ... ..	...	...	...	2	1	3
Bronchitis, ... ..	...	...	...	.	...	...
Diarrhœa and Enteritis, ... ..	...	...	..	..	...	...
Other Digestive Diseases, ... ..	...	...	...	...	...	...
Congenital Malformations, ... ..	...	...	...	...	..	...
Congenital Heart, ... ..	...	...	..	...	...	...
Premature Birth, ... ..	1	.	...	...	...	1
Atrophy, Debility, & Marasmus	...	...	...	...	...	...
Atelectasis, ... ..	...	...	...	...	...	...
Injury at Birth, ... ..	...	..	...	...	...	...
Suffocation, overlaying, ... ..	...	...	...	.	...	...
Syphilis. ... ..	...	...	...	...	.	...
All other causes, ... ..	..	...	...	...	...	...
Total, ... ..	1	...	...	2	1	4





# Table XI—Infantile Mortality.

## DOLLAR BURGH.

	Under 1 Week.	1 Wk. and under 4 Wks.	4 Wks. and under 3 Mths.	3 Mths. and under 6 Mths.	6 Mths. and under 12 Mths.	Total.
Chicken-pox, ... ..	..	...	..	...	...	...
Measles, ... ..	..	...	..	...	...	...
Scarlet Fever, ... ..	..	..	..	...	..	...
Whooping Cough, ... ..	..	...	..	...	...	...
Diphtheria and Croup, ... ..	..	...	...	..	...	..
Erysipelas, ... ..	..	..	..	..	..	...
Tuberculous Diseases ... ..	..	...	...	..	...	...
Meningitis (not Tuberculous),...	...	...	..	..	...	...
Hydrocephalus, ... ..	...	...	...	..	...	...
Convulsions, ... ..	...	...	..	..	...	...
Pneumonia (all forms), ... ..	...	...	...	...	...	...
Bronchitis, ... ..	...	...	...	..	...	...
Diarrhoea and Enteritis, ... ..	...	...	..	..	..	..
Other Digestive Diseases, ... ..	...	...	...	...	...	...
Congenital Malformations, ... ..	...	...	...	...	...	...
Congenital Heart, ... ..	...	...	..	...	...	...
Premature Birth, ... ..	...	..	...	...	...	...
Atrophy, Debility, & Marasmus ... ..	...	...	..	..	...	...
Atelectasis, ... ..	...	...	...	..	...	...
Injury at Birth, ... ..	...	..	...	...	..	...
Suffocation, overlaying, ... ..	...	...	...	...	...	...
Syphilis, ... ..	...	...	...	..	..	...
All other causes, ... ..	..	...	..	...	...	...
Total, ... ..	...	...	...	...	...	Nil



## ALLOA WATER SUPPLY.

### Notes by the Medical Officer of Health upon the existing Supply with comparative comments upon Glendevon Waterworks Supply.

These notes have been prepared at the request of the Convener of the Water Committee to assist the Town Council in their decision as to whether or not they will exercise their option to obtain a share of the Glendevon Waterworks Supply.

In comparing the relative advantages and disadvantages of retaining the present supply with acquiring a share of the Glendevon Supply the main factors for consideration are the **Quality**, the **Quantity** and the **Cost** of the water in each case.

Mr Mackie, the Burgh Water Engineer, in his notes upon the subject, has gone into the details of all three factors very fully, after considerable and painstaking labour. It is unnecessary for me, therefore, to go over the same ground, but I regret that he did not consult with me when preparing the notes upon the **quality**, as we now possess such a large mass of analytical data, both chemical and bacteriological, relating to the existing supply that we might have given even a more convincing and scientific tabulation of results in favour of retaining it.

To produce these data now, when so much detail has already been produced for the consideration of the Town Council, might only lead to confusion in the minds of its Members. I shall therefore be as brief as possible, with the assurance that any opinions given by me can be supported by the scientific data referred to.

1. **Quality.**—When considering the quality of a water supply for domestic use one must deal with (1) The nature of the source, including existing or possible pollutions, (2) The ways and means adopted, or which can be adopted, to protect the water from pollution and (3) the existing or possible means of purifying it if it is or should become polluted. The final product, i.e., the water as it is supplied to consumers, must bear criticism not only upon its chemical analysis and its bacteriological analysis, but those analyses must be weighed and considered in conjunction with (1) the source, (2) the means of protection and (3) the means of purification.

**Glendevon Supply.**—(1) This is a virgin supply from upland surfaces with only one house on its gathering ground. Naturally it is a very pure water and can be safely supplied for domestic purposes without purification methods except, perhaps, "rapid filtration" to remove colour and to exclude the vegetable and animal life which normally exists in reservoirs. It will be seen from the chance analysis produced in Mr Mackie's notes that it contains fewer solids and less chlorine and is much softer than Alloa water, but that otherwise, both chemically and bacteriologically, it is no better than the "filtered" Alloa Water.

(2) There is unlikely to be any development in its gathering ground to produce pollution unless minerals are discovered in paying quantities, so that the **protection** of the supply from pollution is a simple matter.

(3) The necessity for purification does not arise except as mentioned under (1).

**Alloa Water Supply.** (1) The source is upland surface water which at its origin gives good analytical results and the gathering ground there is free from human habitations. Unfortunately, as the River Black Devon proceeds on its way to the point at Forestmill from which its water is abstracted for the Alloa Supply, it is polluted at various points by sewage from houses, pit water and surface washings from manured fields. While natural agencies have purified it to some extent by the time it reaches Forestmill it cannot be considered a satisfactory water at that point. The Council is familiar with these pollutions and there is no need to tabulate them here, but it is right to point out that additional houses are being erected in the gathering ground and further coal mining developments are expected to take place there.

(2) To protect the supply from pollution small sewage purification plants have been installed wherever possible, and coal washings have been dealt with in settling tanks, but these means have not been entirely satisfactory. Fortunately, the building of the new houses in Steelend district has brought matters to such a pass that a Special Drainage District has been formed for Steelend and Saline, and an up-to-date sewage purification work is to be erected before the new houses are occupied. This purification work will also deal with all the sewage from the existing houses in the district and should lead to considerable improvement. At the same time, should the purification works fail to be sufficient to adequately purify the sewage, it is possible that, by further treatment, e.g., humus tanks, land treatment with surface irrigation, or even piping the effluent down past the intake at Forestmill, the water of the Black Devon may be further protected and much improved in spite of coal mining developments.

(3) The methods adopted to purify Alloa Water are well known. The great safeguard is **Storage** in Gartmorn Dam with its 150 days supply. Experts admit that storage will, by its properties of (a) sedimentation, (b) equalisation and (c) devitalisation of the organisms of water-borne disease, remove all danger for practical purposes in two weeks and that in six weeks not even any attenuated water-borne disease germs will exist. It is therefore a great asset to have such a storage capacity as Gartmorn Dam provides, and it should be protected and jealously guarded as a birthright of great importance to the present and future generations of the people of Alloa. Arising out of this point, Mr Mackie deals with the need, as pointed out by me for several years past, of erecting a more efficient pumping plant, so that the High Service supply can always obtain stored water prior to filtration. At present an occasional breakdown in the pumping plant means that a proportion of unstored water has to be passed to the High Service Filters to meet the demand, and I emphatically state that the use of such unstored water is far from satisfactory and might, under certain conditions be dangerous. This defect can easily be rectified upon the lines suggested by Mr Mackie at a moderate cost. We have a long series of analyses of the water stored in Gartmorn Dam from 1914 up to the present time and it proves that we have at our doors a good class potable water even before filtration.

The final line of defence against water-borne disease which exists at present is our filtration system. This is carried out by slow sand filtration at a very slow rate (from 1.8 to 2 gallons per square foot per hour), and the final product of water as supplied to the consumers has stood the test of periodical analyses during the past eleven years, with the invariable result that it has been described by the late Professor Hunter Stewart and by Dr Young of the Usher Institute, Edinburgh, as a water of great purity, both chemically and bacteriologically.

We have thus arrived at a final product which, if we exclude hardness and dissolved solids, is "analytically" as pure as the recent water samples taken at Glendevon Reservoir. But we have not yet exhausted the resources of modern scientific methods of purifying water. We can sterilize the water by the "excess lime" process with which we experimented in 1914 or by chlorination. One advantage of the former method, among others, is the fact that it would also reduce the hardness of the water, which even at present is not excessive.

Further, by a combination of sterilisation (before or after filtration) with "rapid filtration" followed by slow sand filtration we can secure "safety" and a physically and chemically satisfactory final product. I am quoting almost word for word statements made by one of the most eminent scientific water experts in the world. I have had the privilege of placing before him the facts relating to Alloa Water Supply and he has had the advantage of seeing the gathering ground and its pollutions, the storage capacity of Gartmorn Dam, our filtration works and the results of numerous analyses. In a letter to me of recent date, when referring to an excess lime experimental plant he makes the following statement, viz.:—"I think you will be so impressed with the capabilities of the process that you will elect to stick to your present supply and rely on the excess lime method now, or hereafter to safeguard Alloa, however much the pollutions may increase." That is a very definite and encouraging statement from one of the "big" men dealing with water pollution and purification.

11. Quantity.—Mr Mackie's notes show that nearly  $1\frac{1}{2}$  million gallons per day would be required from Glendevon to meet, on all occasions, the present demand through our existing service pipes. Our present supply can meet this demand, but we may not get this amount from Glendevon, except by special arrangement at considerable cost. If we only get one million gallons as provided for in the Order, then we must duplicate certain service pipes to separate domestic water from water used for trade purposes. It appears that, as regards quantity, Alloa would be in the hands of Dunfermline District Committee so far as future needs are concerned. It is almost a foregone conclusion that, if we scrap our present supply for domestic purposes and only use it for trade purposes and compensation water, it will become very much more polluted during the coal mining developments, as the constant care exercised over pollution of a domestic supply will be relaxed. To return to the existing supply to supplement the Glendevon Supply for domestic use would be a difficult matter if Dunfermline District Committee could not see their way to go beyond supplying the quantity stipulated in their Order.

III. **Cost.**—While hesitating to encroach upon this subject which has been fully dealt with by the Town Clerk in his notes and his correspondence with Mr Sherriff, Clerk to Dunfermline District Committee, by Mr Black, Town Chamberlain, and by Mr Mackie in their respective Notes, it appears to me that, to get the same facilities as regards quality and quantity of water for the needs of Alloa now, and for many years to come, the decision to take the full amount required from the Glendevon water supply is going to cost approximately twenty times what it will cost to retain the present supply and make it perfectly safe as regards water-borne disease by the methods already referred to

#### IV. Conclusions.

Quality.	Glendevon Supply.	Alloa Supply.
Source.	Very good.	Poor.
Protection from Pollution.	Simple.	Difficult but possible.
*Purification.	Little necessary for it.	Ample and very efficient.
Quantity Available	Probably insufficient for Alloa's needs.	Ample.
Final Product.	Pure.	Pure.
Cost. (To get similar results).	Excessive.	Reasonable. (5 per cent. of cost of Glendevon Scheme).

- \* Further purification methods, e.g., sterilisation by excess liming or chlorination) can be introduced should the need arise if further pollutions occur.

The comparison of the two supplies as regards Quality is in favour of Glendevon, as regards Quantity in favour of Alloa. The Final Product, as given to the consumer, is pure and satisfactory in both cases. The Cost is excessive in the case of Glendevon and reasonable in the case of Alloa.

C. C. FINLATOR,  
Medical Officer of Health.

County Buildings,  
ALLOA, 16th March, 1925.





